COMPLETE SET OF PENDING CLAIMS

1. (Currently Amended). A method for processing a wafer~~workpiece~~, comprising the steps of:

spraying ~~providing~~ a liquid at a temperature in the range of about 25-150° C onto a surface of the wafer, with the liquid forming a liquid layer on the surface of the wafer ~~workpiece~~;

introducing ozone into an environment containing the wafer ~~workpiece~~ at a rate of at least 90 grams per hour;

controlling a thickness of the ~~liquid on the workpiece so as to form a~~ liquid layer ~~that allows for~~ to allow diffusion of the ozone through the ~~layer~~ liquid layer, to the surface of the wafer ~~workpiece~~; and

with the ozone reacting ~~the ozone~~ at the surface of the wafer ~~workpiece~~, to process the wafer ~~workpiece~~.

2. (Currently Amended). A method for cleaning a surface of a wafer ~~workpiece~~, comprising the steps of:

spraying ~~providing~~ a heated liquid solution of water and at least one of HF and HCl onto the surface of the wafer ~~workpiece~~, with the heated liquid solution forming a liquid layer on the surface of the wafer, and with the heated

liquid solution assisting in maintaining the surface of the wafer ~~workpiece~~ at a temperature in the range of about 25-150° C;

introducing ozone into an environment containing the wafer ~~workpiece~~ at a rate of at least 90 grams per hour;

controlling a thickness of the heated liquid solution ~~to form a thin liquid boundary layer on the surface of the workpiece~~ to allow diffusion of the ozone through the layer of heated liquid solution, ~~boundary layer~~ for reaction at the surface of the wafer ~~workpiece~~, to clean the wafer ~~workpiece~~.

3. (Original) The method of claim 1 where the ozone is introduced at a rate of at least 130 grams per hour.

4. (Original) The method of claim 1 where the ozone is introduced at a flow rate of at least 10 lpm and a concentration of at least 10% by weight.

5. (Original) The method of claim 1 wherein the liquid comprises deionized water.

6. (Original) The method of claim 5 wherein the deionized water is superheated.

7. (Original) The method of claim 1 wherein the liquid includes sulfuric acid, hydrochloric acid, ammonium hydroxide, or deionized water.

8. (Currently Amended) The method of claim 1 wherein the step of controlling comprises the step of rotating the wafer ~~workpiece~~.

9. (Currently Amended) The method of claim 1 wherein the step of controlling comprises the step of rotating the wafer ~~workpiece~~ at a rotation rate equal to or greater than about 300 rpm.

10. (Original) The method of claim 1 wherein the step of controlling comprises adding a surfactant to the liquid.

11. (Currently Amended) The method of claim 1 wherein the step of controlling comprises the step of spraying the liquid onto the surface of the wafer ~~workpiece~~ at a controlled flow rate.

12. (Original) The method of claim 1 wherein the liquid includes water and HF at a concentration ratio of between about 50: 1 and 500: 1.

13. (Original) The method of claim 1 wherein the liquid includes water and HCl at a concentration ratio of between about 50: 1 and 500: 1.

14. (Original) The method of claim 1 wherein the liquid includes water, HF and HCl at a concentration ratio of between about 50: 1: 1 and 500: 1: 1.

15. (Cancelled).

16. (Cancelled).

17. (Previously Presented) The system of claim 27 with the ozone supply system comprising a contactor for receiving the ozone and the liquid.

18. (Cancelled).

19. (Currently Amended) The system of claim 27 further comprising a rotor assembly in the chamber for rotating the wafer ~~workpiece~~.

20. (Previously Presented) The system of claim 27 where the ozone supply system generates a flow of ozone at a flow rate of at least 10 lpm and a concentration of at least 10% by weight.

21. (Previously Presented) The system of claim 27 where the heater comprises a steam boiler.

22. (Cancelled).

23. (Currently Amended) The system of claim 27 ~~further comprising~~ with the means for controlling a thickness of a liquid layer on the wafer ~~workpiece~~, including at least one of:

a rotor for rotating the wafer ~~workpiece~~;

a fluid flow controller or one or more nozzles adapted to generate fine droplets of the liquid.

24. (Cancelled).

25. (Cancelled).

26. (Currently Amended). A method for processing a wafer~~workpiece~~, comprising the steps of:

spraying ~~providing~~ an aqueous liquid ~~boundary layer~~ onto a surface of the wafer ~~workpiece~~ with the liquid ~~boundary layer~~ at a temperature in the range of 55-120° C, and with the aqueous liquid forming into a liquid boundary layer;

introducing ozone into an environment containing the wafer ~~workpiece~~ at a rate of at least 90 grams per hour;

controlling a thickness of the aqueous liquid boundary layer to allow for diffusion of the ozone through the boundary layer and a reaction at the surface of the wafer ~~workpiece~~, to process the wafer ~~workpiece~~.

27. (Currently Amended) A system for processing a ~~workpiece;~~ wafer comprising:

a process chamber;

means for spraying an aqueous liquid onto a surface of the wafer;

means for forming the aqueous liquid into a liquid boundary layer on the surface of the wafer ~~workpiece~~;

an ozone supply system for providing ozone directly or indirectly into the chamber, and having a capacity of at least 90 grams per hour, whereby the ozone can diffuse through the liquid boundary layer to [a] the surface of the wafer ~~workpiece~~; and

a heater for heating the aqueous liquid to a temperature in the range of 25-150° C before the aqueous liquid is sprayed onto the surface of the wafer ~~provided onto the workpiece~~.

28. (Cancelled).

29. (Cancelled).

30. (Cancelled).

31. (Previously Presented) The method of claim 1 wherein the liquid is at a temperature in the range of 55-120° C.

32. (Previously Presented) The method of claim 1 wherein the liquid is heated to a temperature in the range of 75-115° C.

33. (Previously Presented) The method of claim 27 wherein the liquid is heated to a temperature in the range of 75-115° C.

34. (Previously Presented) The method of claim 27 wherein the liquid is heated to a temperature in the range of 85-105° C.